UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,778	12/02/2003	Hiroi Kazushige	501.42868X00	1915

24956 7590 05/30/2007

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER	
VU, THANH T	

ART UNIT	PAPER NUMBER
2174	

MAIL DATE	DELIVERY MODE
05/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,778	KAZUSHIGE ET AL.	
	Examiner	Art Unit	
	Thanh T. Vu	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/02/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

Claim Objections

Claim 16 is objected to because of the following informalities: the claim recites "the terminal The terminal". Appropriate correction is required.

Claim 4 is objected to because of the following informalities: the phrase "the terminal unit the image/handwritten data managing means" is grammatically incorrect. Appropriate correction is required.

Claims 7-9 are objected to because of the following informalities: the phrase "the terminal unit the erasing/information transmitting means" is grammatically incorrect. Appropriate correction is required.

Claim 17 is objected to because of the following informalities: the phrase "the terminal the handwritten data controlling means" is grammatically incorrect. Appropriate correction is required.

Claim 20 is objected to because of the following informalities: the phrase "the terminal the display controlling means" is grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1, 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the remote terminal unit". There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the basic image data". There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the handwritten data plane". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 10-13, 16-18, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ludwig et al. ("Lugwig", U.S. Pat. No. 7,185,054).

Per claim 1, Ludwig teaches a communication system comprising:

a network (fig. 1; WAN, MLAN; col. 6, lines 1-7); and

at least two terminal units connected thereto, wherein each terminal unit comprises (fig. 1; WAN, MLAN; col. 6, lines 1-7):

session controlling means for controlling a session for enabling transmission/receiving of voice, image, and handwritten data to/from the remote terminal unit individually (col. 6, lines 28-39; *bidirectional communication of audio and video data;* col. 19, lines 11-18 and col. 36, lines 50-56; *share button to share a snap shot image;* col. 36, lines 58-63; *annotate the image, see figs. 37 and 40)*

display means for displaying said image and said handwritten data (figs. 37 and 40; *handwritten data 222, 250 and 251)*,

wherein said image data and said handwritten data are overlapped and displayed on a display of said display means (fig. 37; col. 37, line 10-12; *handwritten data and image 220 data are overlapped on the display).*

Per claim 2, Ludwig teaches the communication system according to claim 1, wherein transmission/receiving of voice data is capable while said image data and/or handwritten data are displayed (fig. 37; col. 37, lines 10-27; *accepting calls while image data and/or handwritten data are displayed).*

Per claim 10, Ludwig teaches the communication system according to claim 1, wherein the terminal further comprises: storing means for storing data to be processed by the self terminal unit, wherein the storing means can select either image or handwritten data or both of image and handwritten data as an object to be stored and stores the selected object in a storage means (fig 28; col. 27, lines 3-12; *storing of original bit map and the original bit map with annotation (handwritten data).*

Per claim 11, Ludwig teaches the communication system according to claim 1, wherein in the terminal said session controlling means, when starting and ending image and/or handwritten data communication, can transmit/receive image and/or handwritten data from/to the remote terminal unit registered beforehand without requiring the permission of the receiving-side user (col. 21, lines 4-16; *registering of the collaborative services*; col. 24, lines 43-55; *adding (registering) of other participants;* col. 26, lines 44-60; *sharing mode is initiated without permission from the receiving-side.*

Per claim 12, Lugwig teaches the communication system according to claim 11, wherein in the terminal the session controlling means, when starting and ending a voice session, receives voice data from the remote terminal unit registered beforehand without requiring permission of the receiving-side user (col. 22, lines 31-34; *In "intercom Mode", the all incoming calls are accepted automatically. Therefore, no permission form the receiving-side is needed).*

Per claim 13, Lugwig teaches the communication system according to claim 1, wherein the terminal further comprises: an image data transmission controlling means for controlling transmission of image data (col. 26, lines 24-60; *a participant can share snapshot of image data by selecting SHARE button)*; and an image data receiving controlling means for controlling receiving of image data (col. 26, 24-60; *other participants are considers as receiving side of the snapshot image data)* wherein each of the image data transmission controlling means and the image data receiving controlling means selects a name or contents of the basic image data to transmit/receive the selected one to/from the remote terminal unit (col. 26, lines 24-42; col. 27, lines 13-35; *sharing of image data between participants).*

Per claim 16, Ludwig teaches the communication system according to claim 1, wherein in the terminal The terminal unit further comprises: a handwritten data controlling means for controlling transmission/receiving of handwritten data (col. 26, lines 61-67; *sending of annotation data (handwritten data))*, wherein said handwritten data controlling means collects a sampled handwritten data in a chunk at the predetermined number of sampling times to transmit/receive the chunk of sampled handwritten data (col. 26, lines 31-34 and lines 62-67; *in Ludwig, annotation (handwritten) data sample from one participant will appear virtually simultaneously on the screens of all other participants. In order to achieve this result, the system of Lugwig must send the sampled handwritten data at a frequent interval from one user to other participants. The examiner considers the frequent interval to be "the predetermined number of sample times".)*

Per claim 17, Ludwig teaches the communication system according to claim 16, wherein in the terminal the handwritten data controlling means denotes whether or not a notice is received at each chunk of data alternately between the two subject terminal units (col. 26, lines 61-67; *each participant can annotate the image alternately, which actions and results are displayed (received) on the screen of each participants).*

Per claim 18, Ludwig teaches the communication system according to claim 16, wherein in the terminal the handwritten data controlling means permits of editing of handwritten data on the handwritten data plane while prohibited editing of image data on the image data plane (fig. 28; col. 3-12; *annotation is only allowed on second bitmap image and the original image is kept unchanged (or prohibit of editing).*

Per claim 21, Ludwig teaches a communication system comprising:

a network (fig. 1; WAN, MLAN; col. 6, lines 1-7); and

at least two terminal units connected thereto, wherein each terminal unit comprises (fig. 1; WAN, MLAN; col. 6, lines 1-7):

setting data inputting means for setting a self operation of the terminal and specifying a remote terminal unit with which the terminal unit is to communicate (col. 24, lines 43-54; *adding new participant to communicate with)*,

communication control/input/output means for enabling data to be interchanged between terminal units through the network (col. 19, lines 6-19; *control for initiation of collaborative session)*,

voice inputting means for inputting an external voice to the self terminal unit (fig. 18 A; microphone 600; col. 15, lines 58-67; col. 17, lines 23-27; *capture of audio input signal)*,

voice outputting means for outputting voice data from the terminal unit to external (col. 15, lines 58-67; col. 17, lines 32-35; *transmitting outgoing audio signal to port 802)*,

input processing means for processing information inputted from a user through the setting data inputting means (col. 19, lines 6-19 and lines 20-26; *inputting of information using keyboard and mouse*),

session controlling means for controlling a session for enabling transmission/receiving of a voice to/from the remote terminal unit through the communication control/input/output means (col. 15, lines 58-67; col. 21, lines 44-51; *collaboration session enabling tranmisstion/receiving of audio data)*,

voice transmitting means for encoding voice data inputted through the voice inputting means as packet data to transmit the encoded data to the remote terminal unit through the communication control/input/output means (col. 32, lines 52-61; *compression engine)*,

voice receiving means for obtaining encoded voice data from a voice data packet received through the communication control/input/output means to decode and output the decoded voice data through the voice outputting means (col. 32, line 52-61; *decompression engine*),

storage means for storing data to be processed by the self terminal unit (col. 32, lines 52-61; *compress audio and video data are stored on local disk)*,

display means for displaying data (fig. 18A; *monitor 200; GUI of fig. 37*),

a bus for the connection of the setting data inputting means, the communication control/input/output means, the voice inputting means, the voice outputting means, the storage means, and the display means (fig. 18A; col. 15, lines 58-67, col. 17, lines 3-7 and lines 23-25; col. 32, lines 53-61; *input/out of audio signal and compression/decompression engines that plug into server bus. These engines compress the audio/video stream and store them at local disk*),

handwritten data inputting means for obtaining handwritten data inputted by a user (col. 26, lines 32-35; *annotation (handwritten) data inputted by a participant, see fig. 37, element 222)*,

handwritten data controlling means for controlling transmission/receiving of handwritten data (col. 26, lines 32-35 and lines 61-67; *sending of "operating system command")*,

image data transmission controlling means for controlling transmission of image data (col. 26, lines 24-27; col. 27, lines 13-30; *sharing snapshot to be viewed by all participant)*,

image data receiving controlling means for controlling receiving of image data (col. 26, lines 24-27; col. 27, lines 13-30; *sharing snapshot to be viewed by all participant)*,

image/handwritten data managing means for managing image/handwritten data (col. 27, lines 3-12), and

display controlling means for displaying image and handwritten data on the display means according to instructions received from the image/handwritten data managing means (fig. 37; *image 221, handwritten data 222)*,

wherein the session controlling means controls the session so that the self terminal unit can transmit/receive image and handwritten data to/from the remote terminal unit through the communication control/input/output means, thereby enabling voice communications while pointing to images with use of voices, images, and handwritten data (fig. 37; col. 37, lines 10-27; *accepting calls while image data and/or handwritten data are displayed).*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-9, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig and Ohkado (U.S. Pat. No. 6,542,165).

Per claim 3, Ludwig teaches the communication system according to claim 1, but does not teach wherein the terminal unit further comprises: an image/handwritten data managing means for managing image/handwritten data, wherein the image/handwritten data managing means has a plurality of planes, and wherein the managing means displays basic image data on one of the plurality of planes, and displays handwritten data currently handled in communication on a different plane, so that image and handwritten data are displayed so as to overlap each other by putting the different planes in layers. However, Ohkado teaches an image/handwritten data managing means for managing image/handwritten data, wherein the image/handwritten data managing means has a plurality of planes (fig. 5; *transparent window and subject application)*, and wherein the managing means displays basic image data on one of the plurality of planes (fig. 5; *subject application)*, and displays handwritten data currently handled in communication on a different plane (fig. 5; *transparent window*), so that image and handwritten data are displayed so as to overlap each other by putting the different planes in layers (fig. 5; col. 3, lines 4-11; *overlapping of transparent window and the application window*). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include annotation window as taught by Ohkado in the invention of Ludwig in order to provide a collaboration

system having an application window to share among participants and a transparent window, and transmitting only data on the transparent window, such as graphical image drawn to participants. Thus, this would provide a collaboration system, which reduces unnecessary determination logics to enable a high speed processing.

Per claim 4, the modified Ludwig teaches the communication system according to claim 3, wherein in the terminal unit the image/handwritten data managing means, when having transmitted/received image data, adjusts sizes of the image data plane and the handwritten data plane to the size of the transmitted/received image data (Ludwig, col. 26, lines 24-42 and col. 27, lines 13-22; *a user can adjust sizes of the image data and handwritten data by selecting a smaller or larger portion of a displayed screen to share.)*

Per claim 5, the modified Ludwig teaches the communication system according to claim 3, wherein the terminal unit further comprises: erasing/information transmitting means for erasing image and handwritten data from the display means through the image/handwritten data managing means and transmitting erasure information to the remote terminal unit (Ludwig, col. 26, lines 31-42 and col. 27, lines 3 -12; *a user can erase by a participant and transmit new erased image to other participants).*

Per claim 6, the modified Ludwig teaches the communication system according to claim 3, wherein the terminal unit further comprises: an erasing/information receiving means for erasing image and handwritten data from the display means through the image/handwritten data managing means according to the erasure information from the remote terminal unit (Ludwig, col. 26, lines 31-42 and col. 27, lines 3-12 and lines 31-37; *allowing sharing of information between participants).*

Per claim 7, the modified Ludwig teaches the communication system according to claim 5, wherein in the terminal unit the erasing/information transmitting means can select either image or handwritten data or both of image and handwritten data as an object to be erased and erase a selected object from the display means (Ludwig, col. 27, lines 3-12; *restoring of original image by erasing all annotation (handwritten data).*

Per claim 8, the modified Ludwig teaches the communication system according to claim 6, wherein in the terminal unit, the erasing/information transmitting means notifies the remote terminal unit of completion of the object erasure so that the remote terminal erases the object from its display means according to the notice (Ludwig, col. 16, lines 24-42 and col. 27, lines 13-30; *when content of an existing window is replaced with a modified image by one participant, this modified image would replace (erase) the content of the image on other's participant share window because the share window is shared among the participant. The examiner considers the replacement as a notice to replace (erase) of the content of an existing window).*

Per claim 9, the modified Ludwig the communication system according to claim 7, wherein in the terminal unit the erasing/information transmitting means notifies the remote terminal unit of completion of the object erasure so that the remote terminal erases the object from its display means according to the notice (Ludwig, col. 16, lines 24-42 and col. 27, lines 13-30; *when content of an existing window is replaced with a modified image by one participant, this modified image would replace (erase) the content of the image on other's participant share window because the share window is shared among the participant. The examiner considers the replacement as a notice to replace (erase) of the content of an existing window).*

Per claim 19, the modified Ludwig teaches the communication system according to claim 3, wherein the terminal further comprises: a display controlling means for displaying image and handwritten data on the display means according to instructions received from the image/handwritten data managing means (Ludwig, fig. 37; col. 26, lines 61-67; *action and result of annotation data are received and displayed on the screens of all participants)*, wherein the display controlling means prepares the coordinate systems for both the basic image data and handwritten data, enables a position pointed by handwritten data to be exchanged between two terminal units (Ludwig, col. 26, lines 65-67; *tracking mouse movements and sending the information between participants)*.

Per claim 20, the modified Ludwig teaches communication system according to claim 19, wherein in the terminal the display controlling means enable to scroll both of the image data and the handwritten data to display both of the data on the display means of the remote terminal unit if the position pointed by the handwritten data might not be displayed on the display means of the one terminal unit (Ludwig, figs. 36, 37 and 40; *share window 210 and 221 with scroll control allows information cannot display entirely in share window to display*).

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig and Hwang et al. (U.S. Pat. No. 6,624,827).

Per claim 14, Ludwig teaches the communication system according to claim 1, but does not teach wherein the terminal further comprises: a handwritten data inputting means for obtaining handwritten data inputted by a user, wherein the handwritten data inputting means, when one of two terminal units transmits/receives handwritten data to/from the other, effects

exclusive control so that one terminal unit is allowed to input/transmit handwritten data in contrast the other terminal unit is not allowed. However, Hwang teaches a handwritten data inputting means for obtaining handwritten data inputted by a user, wherein the handwritten data inputting means, when one of two terminal units transmits/receives handwritten data to/from the other, effects exclusive control so that one terminal unit is allowed to input/transmit handwritten data in contrast the other terminal unit is not allowed (figs. 5-6; col. 1, lines 60-67; *lock request for exclusive control of whiteboard).* Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a lock control as taught by Hwang in the invention of Ludwig in order to effectively lock or prohibit the access to the designated object on share information by allowing only a conference participant having a priority over the designated object to access the designated object.

Per claim 15, the modified Ludwig teaches the communication system according to claim 14, wherein in the terminal said the handwritten data inputting means effects exclusive control with the start of hand-writing as a trigger (Ludwig, col. 26, lines 61-61, *annotation control;* Hwang, figs. 5-6; col. 1, lines 60-67; *lock request for exclusive control of whiteboard).*

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carmichael (Pub. No.: US 2003/020853) discloses an enhanced productivity electronic meeting system.

Kurosawa et al. (U.S. Pat. No. 6,466,250) discloses a group environment setting method and system thereof to provide an equivalent environment for plural participants.

Hein et al. (U.S. Pat. No. 6,466,250) discloses a system for electronically mediated collaboration including eye-contact collaboratory.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The examiner can normally be reached on Mon-Thur and every other Fri 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thanh T. Vu
Patent Examiner
AU 2174, TC 2100